

ORGANIC ELECTRO-LUMINESCENCE DEVICE

ABSTRACT

The present invention provides an organic electro-luminescence (EL) device, comprising: a substrate; a plurality of first electrodes formed on the surface of the substrate; a plurality of divisions of organic layer, formed on
5 the first electrodes and being superimposed perpendicularly upon the first electrodes, the organic layer comprising at least one organic EL layer; a plurality of second electrodes, formed on the organic layer; a plurality of bottom insulating pads, each disposed between the divisions of the organic
10 layer and on the two sides of the organic layer; and a plurality of heat sinks formed of a metallic material, each disposed on one of the bottom insulating pads. A moisture absorber is provided between each of the bottom insulating pads and each of the heat sinks and a protective layer is provided on the surface of the device, so that there is space formed between
15 the organic layer, the moisture absorber and the metallic heat sink to achieve cooling and avoiding the outside humidification functions to remarkably prolong the lifetime of the device.